



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/505,239

10/12/2004

Nadya I Tarasova

229694

1908

45733 7590 12/28/2007  
LEYDIG, VOIT & MAYER, LTD.  
TWO PRUDENTIAL PLAZA, SUITE 4900  
180 NORTH STETSON AVENUE  
CHICAGO, IL 60601-6731

EXAMINER

KHANNA, HEMANT

ART UNIT

PAPER NUMBER

1654

MAIL DATE

DELIVERY MODE

12/28/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**UNITED STATES DEPARTMENT OF COMMERCE****U.S. Patent and Trademark Office**

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10505239	10/12/04	TARASOVA ET AL.	229694

LEYDIG, VOIT & MAYER, LTD.  
TWO PRUDENTIAL PLAZA, SUITE 4900  
180 NORTH STETSON AVENUE  
CHICAGO, IL 60601-6731

**EXAMINER**

Marcela M. Cordero Garcia

ART UNIT	PAPER
----------	-------

1654

20071215

**DATE MAILED:**

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner for Patents**

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 C.F.R. § 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 C.F.R. §§ 1.821-1.825 for the reason(s) set forth on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures. Applicant must comply with the requirements of the sequence rules (37 CFR 1.821 - 1.825) before the application can be examined under 35 U.S.C. §§ 131 and 132.

APPLICANT IS GIVEN ONE MONTH FROM THE DATE OF THIS LETTER WITHIN WHICH TO COMPLY WITH THE SEQUENCE RULES, 37 C.F.R. §§ 1.821-1.825. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 C.F.R. § 1.821(g). Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 C.F.R. § 1.136. In no case may an applicant extend the period for response beyond the six month statutory period. Direct the response to the undersigned. Applicant is requested to return a copy of the attached Notice to Comply with the response.

Please direct all replies to the United States Patent and Trademark Office via one (1) of the following:

1. Electronically submitted through EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>>, EFS Submission User Manual - ePAVE)

2. Mailed to:

Mail Stop Sequence

Commissioner for Patents

P.O. Box 22313 1450

Alexandria, VA 22313 1450

3. Hand Carry, Federal Express, United Parcel Service or other delivery service to:

U.S. Patent and Trademark Office

Mail Stop Sequence

Customer Window

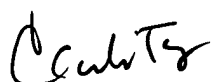
Randolph Building

401 Dulaney Street

Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Marcela M Cordero Garcia whose telephone number is (571) 272-2939. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Cecilia Tsang, whose telephone number is (571) 272-0562.

  
Marcela M Cordero Garcia  
Patent Examiner  
Art Unit 1654

  
Cecilia J. Torres  
Patent Examiner  
Technology Center 1600

<b>Notice to Comply</b>	<b>Application No.</b> 10/505,239	<b>Applicant(s)</b> Tarasova et al.	
	<b>Examiner</b> <b>M M Cordero Garcia</b>	<b>Art Unit</b> 1654	

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☐ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☒ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- ☐ 7. Other:

**Applicant Must Provide:**

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216 or (703) 308-2923

For CRF Submission Help, call (703) 308-4212 or 308-2923

PatentIn Software Program Support

Technical Assistance.....703-287-0200

To Purchase PatentIn Software.....703-306-2600

**PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY**

<b>Sequence Count Sheet</b>	<b>Application No.</b> <b>10/505,239</b>	<b>Applicant(s)</b> <b>Tarasova et al.</b>	
	<b>Examiner</b> <b>MM Cordero Garcia</b>	<b>Art Unit</b>	1654

**DATE OF COUNT**

**Mark only one space below**

- ☐ **(CRFN)** (CRF is unreadable; use CRF Diskette Problem Report)
- ☒ **(CRFD)** (CRF does not comply; use Notice to Comply)
- ☐ **(CRFR)** (CRF required but none submitted; use Notice to Comply)
- ☐ **(bona fide)** (second or subsequent letter to applicant reporting bona fide attempt to comply; use Notice to Comply and send copy of RSL)
- ☐ **(non bona fide)** (second or subsequent letter to applicant reporting non-bona fide attempt to comply; use Notice to Comply and send copy of RSL)

=====

Sequence Listing could not be accepted.

If you need help call the Patent Electronic Business Center at (866)  
217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: Thu Aug 02 17:20:00 EDT 2007

=====

\*\*\*\*\*

Reviewer Comments:

<210> 28

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic

<220>

<221> misc\_feature

<222> (12)..(12)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc\_feature

<222> (13)..(13)

<223> Xaa = at position 13 is norleucine

<400> 28

Phe Ala Leu Ala Glu Glu Glu Ala Tyr Gly Trp Xaa Asp Phe

1

5

10

The above <222> (13)..(13) response is incorrect: "Xaa" is not at  
position 13, "Asp" is.

\*\*\*\*\*

Application No: 10505239

Version No: 2.0

Input Set:

Output Set:

Started: 2007-07-30 18:17:35.343

Finished: 2007-07-30 18:17:36.501

Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 158 ms

Total Warnings: 28

Total Errors: 0

No. of SeqIDs Defined: 28

Actual SeqID Count: 28

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)

**Input Set:**

**Output Set:**

**Started:** 2007-07-30 18:17:35.343

**Finished:** 2007-07-30 18:17:36.501

**Elapsed:** 0 hr(s) 0 min(s) 1 sec(s) 158 ms

**Total Warnings:** 28

**Total Errors:** 0

**No. of SeqIDs Defined:** 28

**Actual SeqID Count:** 28

**Error code**

**Error Description**

This error has occurred more than 20 times, will not be displayed.



SEQUENCE LISTING

<110> TARASOVA, Nadya I  
MICHEJDA, Christopher J  
DYBA, Marcin  
COHRAN, Carolyn

<120> CONJUGATES OF LIGAND, LINKER AND CYTOTOXIC AGENT AND RELATED  
COMPOSITIONS AND METHODS OF USE

<130> 229694

<140> 10505239  
<141> 2004-10-12

<150> US 10/505,239  
<151> 2004-10-12

<150> PCT/US03/06344  
<151> 2003-02-27

<150> 60/360,543  
<151> 2002-02-27

<150> 60/370,189  
<151> 2002-04-05

<160> 28

<170> PatentIn version 3.4

<210> 1  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 1

Phe Ala Leu Ala  
1

<210> 2  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 2

Val Leu Ala Leu Ala  
1 5

<210> 3  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 3

Ala Leu Ala Leu  
1

<210> 4  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 4

Ala Leu Ala Leu Ala  
1 5

<210> 5  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 5

Leu Gly Pro Gln Gly Pro Pro His Leu Val Ala Asp Pro Ser Lys Lys  
1 5 10 15

Gln Gly Pro Trp Leu Glu Glu Glu Glu Glu Ala Tyr Gly Trp Met Asp  
20 25 30

Phe

<210> 6  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> Xaa = at position 2 is norleucine

<400> 6

Trp Xaa Asp Phe  
1

<210> 7  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> Xaa = at position 2 is sulfotyrosine

<400> 7

Asp Xaa Met Gly Trp Met Asp Phe  
1 5

<210> 8  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> Xaa = at position 2 is sulfotyrosine

<220>  
<221> misc\_feature  
<222> (3)..(3)  
<223> Xaa = at position 3 is norleucine

<220>  
<221> misc\_feature  
<222> (6)..(6)

<223> Xaa = at position 6 is norleucine

<400> 8

Asp Xaa Xaa Gly Trp Xaa Asp Phe  
1 5

<210> 9

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 9

Val Pro Leu Pro Ala Gly Gly Gly Thr Val Leu Thr Lys Met Tyr Pro  
1 5 10 15

Arg Gly Asn His Trp Ala Val Gly His Leu Met  
20 25

<210> 10

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 10

Trp Ala Val Gly His Leu Met  
1 5

<210> 11

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 11

Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys  
1 5 10

<210> 12

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<221> misc\_feature

<222> (1)..(8)

<223> wherein the peptide is carboxylated at either the N-or C-terminus

<400> 12

Phe Cys Phe Trp Lys Thr Cys Thr

1 5

<210> 13

<211> 11'

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 13

Arg Pro Leu Pro Gln Gln Phe Phe Gly Leu Met

1 5 10

<210> 14

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 14

Pro Gly Thr Cys Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys

1 5 10 15

<210> 15

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 15

Asn Asp Asp Cys Glu Leu Cys Val Ala Cys Thr Gly Cys Leu

1 5 10

<210> 16  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 16

Asn Tyr Cys Cys Glu Leu Cys Cys Asn Pro Ala Cys Thr Gly Cys Phe  
1 5 10 15

<210> 17  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 17

His Ser Asp Ala Leu Phe Thr Asp Asn Tyr Thr Arg Leu Arg Leu Gln  
1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn Gly  
20 25

<210> 18  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
<222> (17)..(17)  
<223> Xaa = at position 17 is norleucine

<400> 18

His Ser Asp Ala Leu Phe Thr Asp Asn Tyr Thr Arg Leu Arg Leu Gln  
1 5 10 15

Xaa Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn Gly  
20 25

<210> 19  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
<222> (5)..(5)  
<223> Xaa = at position 5 is norleucine

<400> 19

Ala Tyr Gly Trp Xaa Asp Phe  
1 5

<210> 20  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
<222> (8)..(8)  
<223> Xaa = at position 8 is norleucine

<400> 20

Glu Glu Glu Ala Tyr Gly Trp Xaa Asp Phe  
1 5 10

<210> 21  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> Xaa = at position 1 is 2-cyclohexyl-L-alanine

<400> 21

Xaa Leu Ala Leu Ala

1 5

<210> 22

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<221> misc\_feature

<222> (1)..(1)

<223> Xaa = at position 1 is 2-cyclohexyl-L-alanine

<220>

<221> misc\_feature

<222> (2)..(2)

<223> Xaa = at position 2 is 2-cyclohexyl-L-alanine

<400> 22

Xaa Xaa Leu Ala Leu

1 5

<210> 23

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<221> misc\_feature

<222> (1)..(1)

<223> Xaa = at position 1 is 1-naphtyl-alanine

<220>

<221> misc\_feature

<222> (2)..(2)

<223> Xaa = at position 2 is 2-cyclohexyl-L-alanine

<400> 23

Xaa Xaa Leu Ala Leu

1 5

<210> 24

<211> 5



<212> PRT  
<213> Artificial Sequence

<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> Xaa = at position 1 is 1-naphtyl-alanine

<400> 24

Xaa Leu Ala Leu Ala  
1 5

<210> 25  
<211> 15  
<212> PRT  
<213> Artificial

<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
<222> (13)..(13)  
<223> Xaa = at position 13 is norleucine

<400> 25

Val Leu Ala Leu Ala Glu Glu Glu Ala Tyr Gly Trp Xaa Asp Phe  
1 5 10 15

<210> 26  
<211> 15  
<212> PRT  
<213> Artificial

<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> V = at position 1 is conjugated to SPA110

<220>  
<221> misc\_feature  
<222> (13)..(13)  
<223> Xaa = at position 13 is norleucine

<220>  
<221> misc\_feature  
<222> (15)..(15)  
<223> F = at position 15 comprises a C-terminal amide group

<400> 26

Val Leu Ala Leu Ala Glu Glu Glu Ala Tyr Gly Trp Xaa Asp Phe  
1 5 10 15

<210> 27  
<211> 15  
<212> PRT  
<213> Artificial

<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> Xaa = at position 1 is 2-cyclohexyl-L-alanine and is conjugated  
to HTI-286

<220>  
<221> misc\_feature  
<222> (13)..(13)  
<223> Xaa = at position 13 is norleucine

<220>  
<221> misc\_feature  
<222> (15)..(15)  
<223> F = at position 15 comprises a C-terminal amide group

<400> 27

Xaa Leu Ala Leu Ala Glu Glu Glu Ala Tyr Gly Trp Xaa Asp Phe  
1 5 10 15

<210> 28  
<211> 14  
<212> PRT  
<213> Artificial

<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
<222> (12)..(12)  
<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc\_feature  
<222> (13)..(13)  
<223> Xaa = at position 13 is norleucine

<400> 28

Phe Ala Leu Ala Glu Glu Glu Ala Tyr Gly Trp Xaa Asp Phe  
1 5 10